

Offshore Platform Current Monitoring

BMT Scientific Marine Services current monitoring systems have been designed and deployed for a variety of applications including systems for stationary platforms, pipe laying vessels, and a unique combination of a platform based system and a remote “portable” system deployed on a supply vessel.



Our Current Profiling Systems serve the operator by providing:

- Status of current intensity before deciding to start critical operations like running or retrieving a BOP or deploying an ROV;
- Trends in current profiles for advance warning of hazardous operating conditions for risers;
- Decision support for pipe laying operations;
- Identification of approaching loop currents, at ranges up to 25 NM, including an estimated time of arrival of the loop current threat.

All current profile data is archived on permanent storage devices, and can be available on client networks, for either investigation of problems, or future research and development applications. Each current monitoring system can be custom designed to meet your company's needs and application. BMT has extensive experience using a variety of current monitoring instruments ranging from 38 kHz to 600 kHz ADCPs, HADCPs and point meters.

Clients have included:

- BP installations have included ADCPs on Marlin TLP, Holstein, Mad Dog and Horn Mountain spars; Greater Plutonio FPSO;
- ADCP installations for Anadarko include Gunnison, Boomvang, Nansen and Red Hawk spars; Independence Hub semi submersible;
- Chevron's Genesis and Tahiti spars and Blind Faith semi submersible;
- Exxon's Kizomba A and Kizomba B TLPs offshore West Africa;
- Murphy's Frontrunner and Medusa spars in the Gulf of Mexico and Kikeh spar offshore Malaysia;
- Total's Matterhorn TLP;
- BHP's Neptune TLP;
- Platform based 75kHz ADCP on Diamond Offshore's Victory;
- Saipem's Castro Sei Semi Submersible—support for a pipe laying vessel in the straits of Gibraltar;
- Advanced Marine Enterprises—Extensive array of upward looking ADCPs for operational tests and evaluation of sealift ships.

User-friendly display screens provide:

- Current velocity (magnitude and direction) versus depth;
- Platform position versus time (gives drilling supervisor a picture of the lateral offset of the platform with respect to the well center);
- Historical trend plot of current speed at selected depths;
- Radar style Current Map of approaching currents.



Key features:

- Current measurement equipment selected on the basis of best fit for function by a knowledgeable system integrator;
- Well designed deployment and retrieval fixtures for minimum maintenance and down time;
- Striking graphical user interfaces that provide a clear picture of the current and its impact on the platform;
- Well conceived interfaces with client's networks;
- Reliable, optimized archiving schemes.